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From: Lawler, Michael (DPH)
Sent: Monday, April 25, 2011 8:10 AM
To: Piro, Peter (DPH); Salemi, Charles (DPH)
Cc: Nassif, Julianne (DPH)
Subject: RE: 1,4-BD Retraction

Peter,

I am redrafting again the GHB screen protocol from the front end of the analysis. With that in mind and in consideration of the remaining levels of samples to prep and use, could you give me copies of the literature which supports this? I'd like to review the material before I do another prep, particularly in light of the apparent failure of the New Hampshire State Police scheme we attempted most recently.

Thanks, Mike

From: Piro, Peter (DPH)
Sent: Monday, April 25, 2011 7:52 AM
To: Lawler, Michael (DPH); Salemi, Charles (DPH)
Cc: Nassif, Julianne (DPH)
Subject: 1,4-BD Retraction

Hello All,

To extract 1,4-BD from an aqueous sample, I'm suggesting we try a method similar to the extraction of GHB free acid. Aqueous samples are first saturated with NaCl and then extracted 2X with ethyl acetate in a 1:2 ratio (water:ethyl acetate). Excess ethyl acetate is then evaporated while making sure not to evaporate to dryness. During my last round of experiments with 1,4-BD I must have isolated the wrong layer, i.e. the H₂O layer instead of the petroleum ether layer....mi culpa. It turns out that petroleum ether, chloroform and ethyl ether have limited success with BD extractions. Ethyl acetate seems to be a better extracting solvent and the trickery with NaCl is beneficial for total recovery levels.